

### What Is Claimed Is:

1. A method for treating a B-cell, T-cell, myeloid-cell, mast-cell, or plasma-cell disorder in a domestic animal, comprising administering to a domestic animal having said disorder a therapeutic composition comprising a pharmaceutically acceptable carrier and at least one antibody component that is specific to a B-cell, T-cell, myeloid, mast cell, or plasma cell antigen or epitope in said domestic animal.
2. The method of claim 1, wherein said antibody component is a naked antibody.
3. The method of claim 1, wherein said antibody component is an immunoconjugate.
4. The method of claim 1, wherein said antibody is combined with the administration of another antibody that shows higher specificity for tumors of these cells as compared to their normal counterparts.
5. The method of claim 3, wherein said immunoconjugate is a radiolabeled immunoconjugate.
6. The method of claim 3, wherein said immunoconjugate comprises a cytokine.
7. The method of claim 3, wherein said immunoconjugate comprises a drug or toxin.
8. The method of claim 1, wherein said antibody component is part of a fusion protein.
9. The method of claim 1, wherein said B-cell, T-cell, myeloid, mast cell, or plasma cell disorder is a malignancy.
10. The method of claim 1, wherein said B-cell, T-cell, myeloid, mast cell, or plasma cell disorder is an autoimmune disease and said antibody component is specific to a B-cell or T-cell.
11. The method of claim 1, for treating a B-cell or T-cell disorder, wherein said antibody component binds to both a B-cell and a T-cell antigen.
12. The method of claim 11, wherein said disorder is a B- or T-cell malignancy.
13. The method of claim 11, wherein said disorder is an autoimmune disease.

14. The method of claim 1, additionally comprising administering a cytokine.
15. The method of claim 1, additionally comprising administering a chemotherapeutic agent.
16. The method of claim 1, wherein said domestic animal is a companion animal.
17. The method of claim 16, wherein said companion animal is a dog or a cat.
18. The method of claim 1, wherein said domestic animal is a horse.
19. The method of claim 1, wherein said antibody component is an antibody against a domestic animal equivalent of the human CD4, CD5, CD8, CD14, CD15, CD19, CD20, CD21, CD22, CD25, CD33, CD38, CD52, CD54, CD74, CD126 MUC1, Ia, HM1.24, or HLA-DR antigen.
20. The method of claim 19, wherein said antibody component is a radiolabeled antibody component.
21. The method of claim 19, wherein said antibody component is a naked antibody.
22. The method of claim 19, wherein said antibody component is a naked antibody that is specific for a malignancy of B or T cells, myeloid cells, plasma cells, or mast cells.
23. The method of claim 19, wherein said therapeutic composition comprises a combination of an antibody component and a chemotherapeutic agent or immunomodulator.
24. The method of claim 19, wherein said therapeutic composition comprises a combination of a naked antibody and an immunoconjugate or fusion protein.
25. The method of claim 19, wherein said therapeutic composition comprises a combination of two or more naked antibodies against different epitopes of the same antigen or against different antigens associated with one cell type.
26. The method of claim 19, wherein said therapeutic composition comprises a combination of a naked antibody and a radiolabeled immunoconjugate.
27. The method of claim 19, wherein said therapeutic composition comprises a combination of a naked antibody and a toxin immunoconjugate.

28. The method of claim 27, wherein said toxin immunoconjugate comprises an RNase.
29. The method of claim 28, wherein said RNase is a recombinant RNase.
30. The method of claim 29, wherein the antibody component comprises a neutron-capturing boron addend.
31. The method of claim 29, wherein the antibody component comprises a photoactive agent or dye.
32. The method of claim 1, wherein the antibody component comprises a multispecific antibody.
33. The method of claim 1, wherein the antibody component comprises a bispecific antibody.
34. The method of claim 33, wherein said antibody component comprises an arm that is specific for a low-molecular weight hapten and wherein a low-molecular weight hapten with an attached therapeutic agent is administered after the antibody component that is specific to a B-cell, T-cell, myeloid, mast cell, or plasma cell antigen or epitope is administered and has bound to the antigen or epitope.
35. The method of claim 34, wherein the therapeutic agent is a radionuclide.
36. The method of claim 34, wherein the therapeutic agent is a drug.
37. The method of claim 1, wherein said therapeutic composition comprises a combination of a chemotherapeutic agent and an antibody component labeled with a therapeutic radionuclide.
38. The method of claim 1, wherein said therapeutic composition comprises a combination of antibody components which are labeled with different radionuclides.
39. The method of claim 1, additionally comprising first administering to said domestic animal a diagnostic composition comprising a pharmaceutically acceptable carrier and at least one antibody component that is specific to a B-cell, T-cell, myeloid, mast cell, or plasma cell antigen or epitope in said domestic animal, wherein said antibody component is coupled to a diagnostic agent.

40. The method of claim 39, wherein said antibody component comprises an arm that is specific for a low-molecular weight hapten to which the diagnostic agent is conjugated or fused.
41. The method of claim 1, wherein said therapeutic composition comprises a combination of naked antibodies.
42. The method of claim 41, wherein said therapeutic composition comprises a fusion protein of said combination of antibodies.
43. The method of claim 1, wherein said therapeutic composition comprises a combination of naked antibodies and immunoconjugates.
44. The method claim 1, wherein said therapeutic composition comprises a hybrid antibody that binds to more than one B-cell, T-cell, myeloid-cell, mast-cell or plasma-cell antigen.
45. The method of claim 1, additionally comprising administering at least one chemotherapeutic drug.
46. The method of claim 1, additionally comprising administering radiation therapy.
47. The method of claim 1, additionally comprising administering cytokine therapy.
48. The method claim 1, additionally comprising administering an immunosuppressive agent.